Notice of Allowability	Application No.	Applicant(s)	
	09/932,439	JIANG ET AL.	
	Examiner	Art Unit	
	Hong Cho	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the amendment filed on 12/07/2005*.

2. ☒ The allowed claim(s) is/are *1, 4-17, 19-21, 23-32, 34 and 36 (renumbered 1-30)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claims 1, 6, 10, 11, 12, 19, 25, 26, 27, and 34 have been amended as shown in the attachment A.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

hc
Hong Cho
Patent Examiner
3/21/2006

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Attachment A

IN THE CLAIMS

1. (currently amended) A method for conducting a communication session, comprising:

during the communication session, triggering a wireless data communication~~session~~ via ~~with~~ a wireless data channel from a voice communication~~session~~, including pushing data to the wireless data channel and pulling data from the wireless data channel;~~channel,~~

wherein triggering the ~~a~~ wireless data communication~~session~~ includes transmitting one or more of automatic number identification (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID) data via a wireless device; ~~device.;and~~

during the communication session, triggering a voice communication~~session~~ via ~~with~~ a voice channel from the ~~a~~ wireless data communication~~session~~, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across ~~shared between~~ the wireless data channel and the voice channel, and wherein the data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol (WAP) data, short message service (SMS) data, and wireless markup language (WML) data; and

a call service that facilitates the communication session, including,

communicating with a customer application to receive a specification of data to be pushed or pulled during the communication session;

performing data formatting as required on data to be pushed or pulled during the communication session;

communicating with an interactive voice response (IVR) application, including transferring formatted data to the IVR application for delivery to a wireless device and receiving data from the wireless device via the IVR application; and

an incall service that that handles voice channel content to be sent to a wireless device in response to a request from the wireless device, the incall service including,

receiving content from the customer application, wherein the content is selected using a wireless device;

transferring the content to the IVR application;

notifying the customer application that the IVR application is ready to communicate with the wireless device; and

sending an identifier of the wireless device and a status message to the customer application, wherein the status message indicates a status of communication between the wireless device and the IVR application.

Claims 2 and 3 (canceled).

4. (currently amended) The method of claim 1~~claim 3~~, wherein the content is selected during the communication session.

5. (currently amended) The method of claim 1 ~~2~~, wherein the content is selected before the communication session, and wherein the content is associated with an identifier of the wireless device.

6. (currently amended) A method for conducting a communication session comprising~~The method of claim 2, wherein the call service further includes~~:

during the communication session, triggering a wireless data communication via a wireless data channel from a voice communication, including pushing data to the wireless data channel and pulling data from the wireless data channel;

wherein triggering the wireless data communication includes transmitting one or more of automatic number identification (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID) data via a wireless device;

during the communication session, triggering a voice communication via a voice channel from the wireless data communication, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across the wireless data channel and the voice channel, and wherein the data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data,

wireless application protocol (WAP) data, short message service (SMS) data, and wireless markup language (WML) data; and

a call service that facilitates the communication session, including,

communicating with a customer application to receive a specification of data to be pushed or pulled during the communication session;

performing data formatting as required on data to be pushed or pulled during the communication session;

communicating with an interactive voice response (IVR) application, including transferring formatted data to the IVR application for delivery to a wireless device and receiving data from the wireless device via the IVR application; and

an outcall service that that handles voice channel content to be sent to a wireless device at a predetermined time, the outcall service including, ~~including~~:

receiving content from the customer application;

transferring the content to the IVR application;

notifying the customer application that the IVR application is ready to communicate with the wireless device; and

sending a status message to the customer application that indicates a status of communication between the wireless device and the IVR application, including any response from the wireless device.

7. (currently amended) The method of claim 1, further comprising a home page provisioning service, including:

after the initiation of a voice communication ~~session~~ from a wireless device, receiving an identifier for the wireless device;

leaving ~~terminating~~ the voice communication ~~session~~;

locating a homepage uniform resource locator (URL) using the identifier;

sending the homepage URL to a messaging service, wherein the messaging service sends an actionable alert to the wireless device, wherein the homepage URL is embedded in the actionable alert such that responding to the actionable alert using the wireless device initiates a data communication ~~session~~ with the homepage URL.

8. (currently amended) The method of claim 1, further comprising a fax service, including:

receiving previously scheduled fax ~~a fax~~ data from a customer application;

sending the fax data to one or more previously designated recipient fax machines;

receiving a request for specific fax data from a wireless device during a data session;

receiving a destination fax number from the wireless device; and

sending the fax data to the destination fax number.

9. (currently amended) The method of claim 8, wherein the data communication ~~session~~ is a wireless application protocol (WAP) communication~~session~~.

10. (currently amended) ~~The method of claim 1, further comprising~~ A method for conducting a communication session, comprising:

during the communication session, triggering a wireless data communication via a wireless data channel from a voice communication, including pushing data to the wireless data channel and pulling data from the wireless data channel;

wherein triggering the wireless data session includes transmitting one or more of automatic number identification (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID) data via a wireless device; and

during the communication session, triggering a voice communication via a voice channel from the wireless data communication, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across the wireless data channel and the voice channel, and wherein the data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol (WAP) data, short message service (SMS) data, and wireless markup language (WML) data; and

a directory service, including ~~including~~:

maintaining a directory of information items including entries formatted for a wireless device display, wherein maintaining includes receiving entries and configuration preferences;

retrieving entries in response to a request during a communication session via the wireless device, wherein the request includes a voice request ~~request,~~ and a data request; and

displaying a requested information item on the wireless device display.

11. (currently amended) ~~The method of claim 1, further comprising~~ A method for conducting a communication session, comprising:

during the communication session, triggering a wireless data communication via a wireless data channel from a voice communication, including pushing data to the wireless data channel and pulling data from the wireless data channel;

wherein triggering the wireless data session includes transmitting one or more of automatic number identification (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID) data via a wireless device; and

during the communication session, triggering a voice communication via a voice channel from the wireless data communication, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is shared between the wireless data channel and the voice channel, and wherein the data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol (WAP) data, short message service (SMS) data, and wireless markup language (WML) data; and

a device registration service, comprising, ~~comprising:~~

capturing a device identification (ID) during a data communication ~~session~~ initiated by a device user for registering the device;

querying the user for a telephone number of the device;

presenting the user with a personal identification number (PIN) that is unique to the user;

automatically leaving ~~terminating~~ the data communication ~~session~~ and initiating a voice communication ~~session~~ to the device; and

during the voice communication ~~session~~, prompting the user to enter the PIN; and receiving the PIN and relating the telephone number to the device ID.

12. (currently amended) A wireless communication method, comprising:

during a communication session, triggering a wireless data communication via ~~session with~~ a wireless data channel from a voice communication~~session~~, including pushing data to the wireless data channel and pulling data from the wireless data channel; ~~and~~

during the communication session, triggering a voice communication via ~~session with~~ a voice channel from the ~~a~~ wireless data communication~~session~~, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across ~~shared between~~ the wireless data channel and the voice channel, the data comprising historical data and user selection data;

capturing a device identification (ID) during a data communication~~session~~ initiated by a device user for registering the device;

querying the user for a telephone number of the device;

presenting the user with a personal identification number (PIN) that is unique to the user;

when the device does not support a simultaneous voice channel and data channel communication session, automatically leaving ~~terminating~~ the data communication~~session~~ and initiating a voice communication~~session~~ to the device;

during the voice communication~~session~~, prompting the user to enter the PIN; and

receiving the PIN and relating the telephone number to the device ID.

13. (currently amended) The wireless communication method of claim 12, wherein triggering a wireless data communication~~session~~ includes transmitting automatic number identification (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID) data via a wireless device.

14. (original) The wireless communication method of claim 12, wherein the data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol (WAP) data, short message service (SMS) data, and wireless markup language (WML) data.

15. (original) The wireless communication method of claim 12, further comprising toggling between a data channel and a voice channel in one communication session.

16. (original) The wireless communication method of claim 12, wherein the data pushed and pulled includes actionable data that initiates an action in a channel receiving the actionable data.

17. (original) The wireless communication method of claim 12, further comprising navigating data that was pushed or pulled from the voice channel or the data channel, wherein navigation functions include fast forward, rewind, pause, and delete.

18. (canceled).

19. (currently amended) A system for wireless network communication, comprising: at least one network coupled among two or more wireless communication devices and at least one customer application; and

two or more components coupled to the at least one network, including, a computer telephony integration/interactive voice response (CTI/IVR) service, a fax service, a call service, ~~a fax service,~~ and a directory service, wherein the wireless communication devices access the components during a communication session, and wherein the communication session includes,

triggering a wireless data communication~~session~~ with a wireless data channel from a voice communication~~session~~, including pushing data to the wireless data channel and pulling data from the wireless data channel; and

triggering a voice communication~~session~~ with a voice channel from the ~~a~~ wireless data communication~~session~~, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across ~~shared between~~ the wireless data channel and the voice channel,

wherein the call service component includes,

an incall service;

an outcall service; and

a call service interactive voice response (IVR) application, wherein the incall service,

receives content from the at least one customer application, wherein the content is selected using a wireless communication device;

transfers the content to the IVR application;

notifies the customer application that the IVR application is ready to communicate with the wireless communication device; and

sends an identifier of the wireless communication device and a status message to the customer application, wherein the status message indicates a status of communication between the wireless communication device and the IVR application.

20. (currently amended) The system of claim 19, wherein triggering a wireless data communication~~session~~ includes transmitting automatic number identification (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID) data via a wireless communication device.

21. (original) The system of claim 19, wherein the data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol (WAP) data, short message service (SMS) data, and wireless markup language (WML) data.

22. (canceled).

23. (currently amended) The system of claim 19~~claim 22~~, wherein the outcall service handles voice channel content to be sent to a wireless communication device at a predetermined time, wherein handling includes:

receiving content from the customer application;

transferring the content to the IVR application;

notifying the customer application that the IVR application is ready to communicate with the wireless communication device; and

sending a status message to the customer application that indicates a status of communication between the wireless communication device and the IVR application, including any response from the wireless communication device.

24. (currently amended) The system of claim 19, wherein the homepage provisioning service component includes:

after the initiation of a voice communication ~~session~~ from a wireless communication device, receiving an identifier for the wireless communication device;

leaving ~~terminating~~ the voice communication~~session~~;

locating a homepage uniform resource locator (URL) using the identifier;

sending the homepage URL to a messaging service, wherein the messaging service sends an actionable alert to the wireless communication device, wherein the homepage URL is embedded in the actionable alert such that responding to the actionable alert using the wireless communication device initiates a data communication~~session~~ with the homepage URL.

25. (currently amended) ~~The system of claim 19,~~ A system for wireless network communication, comprising: at least one network coupled among two or more wireless communication devices and at least one customer application; and

two or more components coupled to the at least one network, including, a computer telephony integration/interactive voice response (CTI/IVR) service, a fax service, a call service, and a directory service, wherein the wireless communication devices access the

components during a communication session, and wherein the communication session includes,

triggering a wireless data communication via a wireless data channel from a voice communication, including pushing data to the wireless data channel and pulling data from the wireless data channel; and

triggering a voice communication via a voice channel from the wireless data communication, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across the wireless data channel and the voice channel,

wherein the fax service component includes,~~includes:~~

an application specific wireless markup language (WML) dialog module coupled to a wireless communication device;

a fax server coupled to the WML dialog module; and

a messaging service, wherein the fax service,

executes a request to send a fax, including receiving the request~~,~~ ~~including~~ during a wireless application protocol (WAP) session, wherein the request includes format and addressing information ~~during a wireless application protocol (WAP) session~~, and sending a status message to a wireless device regarding a status of the request; and

executes a scheduled request to send a fax to one or more previously identified recipients, including sending a message to the one or more recipients asking whether the recipient wants to receive the fax, and sending a message to a sender of the scheduled request indicating a status of the scheduled request.

26. (currently amended) ~~The system of claim 19,~~ A system for wireless network communication, comprising: at least one network coupled among two or more wireless communication devices and at least one customer application; and

two or more components coupled to the at least one network, including, a computer telephony integration/interactive voice response (CTI/IVR) service, a fax service, a call service, and a directory service, wherein the wireless communication devices access the

components during a communication session, and wherein the communication session includes,

triggering a wireless data communication via a wireless data channel from a voice communication, including pushing data to the wireless data channel and pulling data from the wireless data channel;

triggering a voice communication via a voice channel from the wireless data communication, including pushing data to the voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across the wireless data channel and the voice channel and;

~~wherein the two or more components further comprise~~ a device registration service, comprising,~~comprising:~~

capturing a device identification (ID) during a data communication~~session~~ initiated by a device user for registering the device;

querying the user for a telephone number of the device;

presenting the user with a personal identification (PIN) number that is unique to the user;

when the device does not support a simultaneous voice channel and data channel communication session, automatically leaving ~~terminating~~ the data communication~~session~~ and initiating a voice communication~~session~~ to the device; and

during the voice communication~~session~~, prompting the user to enter the PIN; and receiving the PIN and relating the telephone number to the device ID.

27. (currently amended) An electromagnetic medium having instructions stored on it, that when executed by a processor, cause the processor to:

during a communication session between two or more devices, trigger a wireless data communication~~session~~ via ~~with~~ a wireless data channel from a voice communication~~session~~, including pushing data to the wireless data channel and pulling data from the wireless data channel; ~~and~~

during the communication session, trigger a voice communication~~session~~ via ~~with~~ a voice channel from a wireless data communication~~session~~, including pushing data to the

voice channel and pulling data from the voice channel, wherein during the communication session, data is maintained across ~~shared between~~ the wireless data channel and the voice channel;

capturing a device identification (ID) during a data session initiated by a device user for registering the device;

querying the user for a telephone number of the device; presenting the user with a personal identification number that is unique to the user;

when the device does not support simultaneous voice channel and data channel communication sessions, automatically leaving the data communication and initiating a voice communication to the device;

during the voice communication, prompting the user to enter the PIN; and

receiving the PIN and relating the telephone number to the device ID.

28. (currently amended) The electromagnetic medium of claim 27, wherein triggering a wireless data communication~~session~~ includes transmitting automatic number identification (ANI) data, dialed number identification service (DNIS) data, and unique identifier (UID) data via a wireless device.

29. (original) The electromagnetic medium of claim 27, wherein the data pushed and pulled includes VoiceXML data, hypertext transfer protocol (HTTP) data, wireless application protocol (WAP) data, short message service (SMS) data, and wireless markup language (WML) data.

30. (original) The electromagnetic medium of claim 27, further comprising toggling between a data channel and a voice channel in one communication session.

31. (original) The electromagnetic medium of claim 27, wherein the data pushed and pulled includes actionable data that initiates an action in a channel receiving the actionable data.

32. (original) The electromagnetic medium of claim 27, further comprising navigating data that was pushed or pulled from the voice channel or the data channel, wherein navigation functions include fast forward, rewind, pause, and delete.

33. (canceled).

34. (currently amended) A wireless communication apparatus, comprising:

means for triggering a wireless data communication via ~~session with~~ a wireless data channel from a voice communication~~session~~, and for triggering a voice communication via ~~session with~~ a voice channel from the ~~a~~ wireless data communication~~session~~, wherein during the communication session, data is maintained across ~~shared between~~ the wireless data channel and the voice channel; and

call service means for facilitating the communication session, including,

means for communicating with a customer application to receive a specification of data to be pushed or pulled during the communication session;

means for performing data formatting as required on data to be pushed or pulled during the communication session; ~~and~~

means for communicating with an interactive voice response (IVR) application, including transferring formatted data to the IVR application for delivery to a wireless device and receiving data from the wireless device via the IVR application; and

incall service means that that handles voice channel content to be sent to a wireless device in response to a request from the wireless device, the incall service including:

means for receiving content from the customer application, wherein the content is selected using a wireless device;

means for transferring the content to an interactive voice response (IVR) application;

means for notifying the customer application that the IVR application is ready to communicate with the wireless device; and

24 ____ means for sending an identifier of the wireless device and a status
25 message to the customer application, wherein the status message indicates a status of
26 communication between the wireless device and the IVR application.

1 35. (canceled).

1 36. (currently amended) The apparatus of claim 34~~claim 35~~, wherein the call
2 service means further includes an outcall service that that handles voice channel content to
3 be sent to a wireless device at a predetermined time, the outcall service, including:
4 means for receiving content from the customer application; means for transferring
5 the content to the IVR application;
6 means for notifying the customer application that the IVR application is ready to
7 communicate with the wireless device; and
8 means for sending a status message to the customer application that indicates a
9 status of communication between the wireless device and the IVR application, including
10 any response from the wireless device.